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| 09/464,167 | 12/16/1999 | HIDETO SUZUKI | P/1905-91 | 7202 |

7590 09/06/2005

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EXAMINER

CORRIELUS, JEAN B

ART UNIT PAPER NUMBER

2637

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/464,167

Applicant(s)

SUZUKI, HIDETO

Examiner

Jean B. Corrielus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 5-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

DRAWING

The drawings are objected to because Fig. 3 of the drawing shows a signal output between the rake combiner and the discriminator going to the decoder of Fig. 2. However, in figure 2, the decoder does not include an input receiving a signal from the ICU. The output of the ICU is provided to both a first adder in some instance and to both a first and second adder and other instances. The same comment applies to figs 5 and 6. Figure 5, each ICU 22 should have a second input coupled to demodulator 29. In addition, fig. 6, per the disclosure a view of the ICU circuit of fig. 5. Fig. 6 is shown to include parallel processing of signal 31(r(t)) in a plurality of circuit elements each including the following elements (32-35) and the parallel processing of the output of the discriminator 37. It appears that each ICU element shown in fig. 5 a multipath type processing circuit. Is that the case?

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

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of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings were received on 7/12/05. These drawings are acceptable. However, the drawing is still objected to for the reasons set forth above.

SPECIFICATION

In view of amendment to the drawing filed on 7/12/05, the specification needs to be amended to replaced "313" by "211".

CLAIM OBJECTION

Claims 2-6 are objected to because of the following informalities:

Claim 2, line 1, "controller" should be replaced by "circuit" so as to be consistent with recitation in claim 1, line 1; line 2, "as the reception characteristics to be compared and evaluated" should be move to line 4 after " are used"; line 4, "wherein" should be inserted "before "the".

Claim 3, line 3, "can be" should be replaced by "is"; line 8, "notifying" should be replaced by "providing to"; end of line 11, "the" should be deleted; line 14, "upon" should be replaced by "after"; line 17, recites "an **interference canceller determines that a**

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degree of improvement of the reception characteristics is low” shouldn’t the interference canceller configured to only **“cancel interference”**?

As per claim 4, line 1, “AGC controller” should be replaced by “circuit” so as to be consistent with antecedent in claim 3, line 1.

Claim 5, line 4, “the” should be replaced by “a respective one of said”; line 5, “upon the” should be replaced by “after”; line 7, “a comparison result” should be replaced by “comparison results generated from said comparing step”; line 8, shouldn’t “gains” be replaced by “gain”, and before “prior”, “of a variable gain amplifier” should be inserted to provide antecedent basis for subsequent recitation in claim 6, lines 2-3; last line, “result” should be replaced by “results”.

Claim 6, line 2, “a gain” should be replaced by “the/said gain” so as to make use of antecedent in claim 5, line 8; line 3, “wherein” should be inserted before “an SN”; line 5, “wherein” should be inserted after “and”.

Correction is required.

Allowable Subject Matter

Claim 1 is allowed over the prior art.

Claims 2-6 would be allowable if amended to overcome the objection set forth above.

Response to Arguments

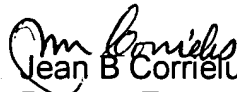
In view of the amendment filed on 7/12/05, the objection to claims 1, 3 and 5 has been withdrawn.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Maxi-Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jean B Corrielus
Primary Examiner
Art Unit 2637

9/3/05